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BEFORE THE ARIZONA CORPORATION COMMISSION

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AZ CORP COMMISSION

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JIM IRVIN  
COMMISSIONER-CHAIRMAN  
RENZ D. JENNINGS  
COMMISSIONER  
CARL J. KUNASEK  
COMMISSIONER

IN THE MATTER OF THE COMPETITION IN ) DOCKET NO. U-0000-94-165  
THE PROVISION OF ELECTRIC SERVICES )  
THROUGHOUT THE STATE OF ARIZONA )  
NOTICE OF FILING

Carl W. Dabelstein hereby provides notice of filing of his  
direct testimony as required by the Commission's Third Amended  
Procedural Order, dated the 5th day of January, 1998, in the  
above-referenced docket.

RESPECTFULLY SUBMITTED this 21ST day of January, 1998.

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this 21ST day of January, 1998  
with:

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Arizona Corporation Commission  
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7       COMMISSIONER

8   IN THE MATTER OF THE COMPETITION IN )  
9   THE PROVISION OF ELECTRIC SERVICES )  
10   THROUGHOUT THE STATE OF ARIZONA )  
11   \_\_\_\_\_ )

DOCKET NO. U-0000-94-165

12  
13                   DIRECT TESTIMONY

14                   OF

15                   CARL W. DABELSTEIN, CPA  
16  
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24  
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28                   January 21, 1998

## TESTIMONY OF CARL W. DABELSTEIN

### SUMMARY OF KEY POINTS

1. The Rules are ambiguous and lack the specificity necessary to properly address stranded costs. They should provide for the recovery of stranded costs, whether or not recorded on the affected utilities' balance sheets. They should be amended to specify the types of stranded costs allowed for recovery, the appropriate calculation period and method, and the time period and mechanism for recovery.
2. The entire stranded cost issue must be resolved prior to the beginning of retail competition. This proceeding and the companies' anticipated stranded costs filings should proceed as rapidly and diligently as possible, in order to meet the existing January 1, 1999 commencement date.
3. Costs that may be considered as stranded include capital and operating costs associated with generation assets, purchased power agreements, fuel and related transportation contracts and regulatory assets.
4. Utilities bear a strong burden of proof with respect to the justification for inclusion of the costs they consider to be stranded, and for which recovery is sought.
5. The most appropriate method for quantifying stranded costs is the "Net Revenues Lost" approach.
6. In computing stranded costs, it is critical to consider the expected remaining service lives and cost recovery periods associated with such assets that have been reflected in the ratemaking process.
7. Stranded costs should be recoverable over a period ranging from five to ten years.
8. The introduction of retail competition is intended to benefit all customers; therefore, all customers should bear some responsibility for stranded costs.
9. There is tremendous uncertainty associated with the process of estimating stranded costs. A mandatory, periodic true-up should be required by the Rules.
10. Parties advocating price caps and rate freezes should be required to provide definitive details of their proposals.
11. Utilities have a clear obligation to take all reasonable and necessary measures to mitigate their stranded costs. Mitigation can be achieved through cost reduction, revenue enhancement, or delaying the introduction of competition. Mitigation efforts should be evaluated on a company-specific basis.



TESTIMONY OF CARL W. DABELSTEIN

SUMMARY OF KEY POINTS

(CONTINUED)

12. Stranded costs have significant accounting and income tax implications. Any inquiry into stranded costs must consider all relevant accounting tax issues.
13. Parties advocating less than full stranded cost recovery should be required to provide detailed justification for their recommendations.

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Appendix A - Professional Qualifications	

## Introduction

1 Q. Please state your name and address.

2 A. My name is Carl W. Dabelstein. My address is 2211 East Edna  
3 Avenue, Phoenix, Arizona 85022.

4

5 Q. In what capacity are you appearing in this evidentiary  
6 proceeding?

7 A. I am testifying as a consumer of electricity, served by  
8 Arizona Public Service Company.

9

10 Q. Please state your professional qualifications.

11 A. A description of my education and professional experience is  
12 attached hereto as Appendix A.

13

14 Q. What is the purpose of your testimony?

15 A. The purpose of my testimony is to provide input to this very  
16 important inquiry into the stranded costs that will likely  
17 occur with the introduction of retail competition into the  
18 electric utility business in the State of Arizona.

19 Specifically, I will address the various key issues

20 identified by the Chief Hearing Officer in his Procedural  
21 Orders recently issued in this Docket. I will then address  
22 several additional matters that I believe warrant the

23 Commission's consideration in this most important aspect

24 of electric industry restructuring. As a consumer, I want

25 the benefits of new technology to be realized and to see the

26 price of electricity reduced; however, for retail electric

27 competition to be successful in the long run, it must be

28 implemented in a rational, equitable and economically

1 efficient manner.

2  
3 Q. What has been your experience with respect to deregulation  
4 and competition in the public utility industry?

5 A. I have spent considerable time during the past fifteen years  
6 observing and assessing the effects of deregulation and the  
7 introduction of competition into segments of the public  
8 utility business that has been traditionally conducted  
9 exclusively by regulated monopolies.

10  
11 Specifically, as more fully described in the accompanying  
12 Appendix A, I spent almost the entire decade of the 1980s  
13 as a regulatory consultant, serving a clientele comprised of  
14 both utilities and regulatory agencies. In connection  
15 therewith, a substantial portion of my time was consumed in  
16 identifying and assessing the effects of competition in both  
17 the terminal equipment and long distance markets in the  
18 telecommunications industry. During the latter part of the  
19 1980s and early years of this decade, my focus turned to the  
20 effects of FERC activities deregulating segments of the  
21 natural gas pipeline business, such as through its issuance  
22 of Order Nos. 500 and 636. Finally, for most of this decade  
23 I have been involved in activities associated with the  
24 introduction of retail competition in the electric industry,  
25 both on a national and regional level. From 1993 through  
26 1995, I participated in electric restructuring activities in  
27 the States of Wisconsin, Minnesota, and North Dakota. Also  
28 during that period, I served on the committee established by  
29 the Edison Electric Institute to address the stranded cost

1 and accounting implications of the FERC MegaNOPR that became  
2 Order No. 888. For the past two years, I have been an  
3 active observer of the electric restructuring activities  
4 here in Arizona, most recently as Director of the Utilities  
5 Division of the Arizona Corporation Commission. In that  
6 capacity I coordinated the efforts of five of the six  
7 working groups created to address key restructuring issues.  
8 I also authored the report containing recommendations of the  
9 Working Group and Utilities Division Staff with respect to  
10 stranded costs that was submitted to the Commission in early  
11 October.

#### Electric Competition Rules

12 Q. Do the Electric Competition Rules consider stranded costs?

13 A. Yes they do. Section R14-2-1601 includes a definition of  
14 stranded costs. Section R14-2-1607 addresses the Recovery  
15 of Stranded Costs. It provides for the recovery of  
16 unmitigated stranded costs, directs the creation of a  
17 special working group to address and report on a variety  
18 of stranded cost issues, and contemplates the filing of  
19 stranded cost estimates by the affected utilities. It also  
20 limits the charging for stranded costs to only those  
21 customers purchasing power in the competitive market.

22  
23 Q. Do you believe the Electric Competition Rules are adequate  
24 and provide the proper guidance with respect to stranded  
25 costs?

26 A. No, I do not. They are a starting point, but contain some  
27 ambiguities and lack the degree of specificity that I feel

1 is necessary to properly address the stranded cost issue in  
2 a reasonable, equitable and timely fashion. All ambiguities  
3 should be eliminated and the Rules should be sufficiently  
4 comprehensive to minimize opportunities for differing  
5 interpretation and/or application.

6  
7 Q. Please describe the ambiguities that you believe exist in  
8 the Rules.

9 A. First, it is unclear whether the definition of stranded  
10 costs would cover unrecorded assets and liabilities. Due  
11 to certain requirements under Generally Accepted Accounting  
12 Principles, the affected utilities likely have certain  
13 stranded costs that do not appear as recorded assets and  
14 liabilities in their published financial statements. Some  
15 examples are the generation portion of the transitional  
16 obligation for postemployment healthcare benefits under  
17 Statement of Financial Accounting Standards No. 106, and  
18 amounts that may have been ordered by this Commission to be  
19 deferred for ratemaking, but which may not be reported under  
20 Generally Accepted Accounting Principles as regulatory  
21 assets by the respective utilities. There also may be  
22 unrecorded obligations such as those relating to long-term  
23 fuel and transportation contracts. The affected utilities  
24 should be permitted to request the opportunity to recover  
25 all unmitigated stranded costs, whether or not presently  
26 reported as assets and liabilities in their balance sheets.

27  
28 Another ambiguity that exists in the Rules is that with  
29 respect to the manner in which the costs of disposing spent

1 nuclear fuel should be considered for recovery purposes.  
2 Section R14-2-1608 permits the costs of nuclear power plant  
3 decommissioning programs to be included in the System  
4 Benefits Charge; however, nowhere in the Rules is the cost  
5 of spent nuclear fuel disposal addressed. The Rules should  
6 be clarified to identify whether spent fuel costs are part  
7 of stranded costs, or should be treated in the same manner  
8 as the costs of nuclear decommissioning.

9  
10 Q. With respect to stranded costs, what specificity do you  
11 believe needs to be included in the Rules?

12 A. In order to avoid significant differences between the  
13 affected utilities, I believe that some standardization  
14 is desirable. The types of costs that may be considered  
15 as stranded, as well as the calculation period and method  
16 used for quantifying stranded costs, should be identified.  
17 Moreover, the time period and mechanism to be used for  
18 stranded cost recovery should be set forth in the Rules.

#### Timing of Stranded Cost Filings

19 Q. When should the affected utilities be required to file the  
20 estimates of their stranded costs?

21 A. Although the Rules do require the affected utilities to file  
22 estimates of their stranded costs, they are silent with  
23 respect to the timing of such filings. It is patently  
24 obvious that, if the transition to retail competition is to  
25 commence and proceed in a rational, efficient, and timely  
26 manner, the entire stranded costs issue, including their  
27 identification, quantification, and timing and method of

1 recovery must be resolved as soon as practical. The affected  
2 utilities need to have sufficient guidance from the Rules to  
3 begin preparing their stranded cost estimates and filings.  
4 Then, the Commission Staff and all interested parties need  
5 to have adequate time to thoroughly analyze and object to,  
6 if necessary, the companies' requests. All of this takes  
7 time, and it must be completed prior to the commencement of  
8 retail competition, now scheduled for January 1, 1999. Time  
9 is of the essence. This evidentiary proceeding and the  
10 required filings of stranded cost estimates should proceed  
11 as rapidly and diligently as possible.

Quantifying  
Stranded Costs

12 Q. What costs should be included in stranded costs?

13 A. Any yet-to-be recovered, prudent operating or capital cost  
14 incurred by an affected utility under its traditional  
15 obligation to serve, that is likely unrecoverable in a  
16 competitive environment with prices reflecting marginal  
17 costs, will be stranded. Typically, this will include  
18 generation assets, purchased power agreements, fuel and  
19 related transportation contracts, and regulatory assets.  
20 Other costs may also be considered as stranded, depending on  
21 company-specific facts and circumstances. Generation  
22 assets are the single largest category of stranded costs.  
23 This includes net plant in service, construction work in  
24 progress, common plant associated with generation-related  
25 activities, fuel inventories and related transportation  
26 and handling facilities and equipment, and associated  
27 materials and supplies.



1 Potential stranded generating costs not only include the  
2 facilities' current recorded capital costs, but also the  
3 amounts that will be required to be expended in connection  
4 with their physical removal at the expected end of their  
5 respective service lives. Under the Rules, such costs  
6 associated with nuclear facilities are to be considered as  
7 recoverable under the System Benefits Charge. While clearly  
8 not as great, the costs of removing fossil plants at their  
9 retirement from service may nevertheless be substantial.  
10

11 Regulatory assets represent current expenditures that have  
12 been deferred by the utilities and/or their regulators for  
13 future cost recovery. Such treatment is consistent with the  
14 long-standing principle followed by this Commission and  
15 other regulatory bodies in attempting to synchronize  
16 ratepayer benefit with cost recovery. Regulatory assets may  
17 also be created for moderating the rate impact of  
18 unavoidable or non-annually recurring events, or promoting  
19 utility involvement in public policy initiatives. Among the  
20 more common regulatory assets are: previously flowed-through  
21 deferred taxes, deferred fuel costs, deferred demand side  
22 management costs, deferred pensions and employee benefit  
23 costs, and extraordinary losses.  
24

25 In all cases, I believe that an affected utility has a  
26 strong burden of proof with respect to identifying and  
27 quantifying stranded costs, and a clear obligation to take  
28 all reasonable steps for their mitigation.

1 Q. How may stranded costs be quantified?

2 A. Two predominant approaches exist for quantifying stranded  
3 costs. "Administrative" approaches essentially represent  
4 a process whereby a measure of stranded costs is established  
5 based on estimates and expectations of future market prices  
6 and asset values in a joint effort by the affected utility,  
7 the regulatory agency, and other interested parties. "Market  
8 Valuation" approaches use observed valuation of the stranded  
9 assets in a current market context. The most frequent  
10 administrative approach currently being used is the "Net  
11 Revenues Lost" method. The most frequent market valuation  
12 method is through asset sales or the divestiture of assets.  
13 For reasons more fully covered later in my testimony, due  
14 to the tremendous uncertainty associated with projecting  
15 market prices for power and other key variables, I believe  
16 the risks of estimation associated with a single, up front  
17 market valuation of stranded assets are such that the method  
18 should not be considered for stranded cost quantification.

19

20 Q. Which method do you believe should be used to quantify  
21 stranded costs?

22 A. No method is without its faults or critics; however, all  
23 things considered, I believe the most appropriate method is  
24 the Net Revenue Lost approach, with some opportunity for  
25 periodic true-up. This is a top-down approach that compares  
26 the expected future annual revenue requirements for the  
27 affected utility's generation business under traditional  
28 cost-based regulation with the annual revenues expected to  
29 be recovered in a competitive generation market with prices

1 based on marginal cost. It recognizes that utilities that  
2 made multiple investment decisions under the traditional  
3 form of cost-of-service regulation expected to receive a  
4 revenue stream to cover the cost of such investments over  
5 their expected useful service lives. Under this scenario,  
6 stranded cost is measured as the net present value of the  
7 annual differences between expected revenues under a  
8 continuation of regulation and those likely to be received  
9 after the introduction of retail competition.

10  
11 The Net Revenues Lost approach is the method by which the  
12 FERC, in its Order No. 888, has directed companies subject  
13 to its jurisdiction to quantify wholesale stranded costs.  
14 It considers all of an affected utility's generation costs  
15 under traditional techniques understood by regulators,  
16 utilities, and other usual participants in the ratemaking  
17 process. It allows the calculation to reflect both above-  
18 market and below-market assets and costs. It is a relatively  
19 simple mathematical calculation once relevant assumptions  
20 are known. It eliminates the need for an asset-by-asset  
21 determination and can also accommodate periodic true-up to  
22 reflect the effects of changes in market prices or other  
23 market assumptions.

Calculation  
Time Frame

24 Q. Over what time frame should stranded costs be calculated?

25 A. The time period over which stranded costs are computed will  
26 affect their overall quantification. Under the traditional  
27 obligation to serve, utilities made significant long-term

1 investments on behalf of their customers. Using very long  
2 planning horizons, companies undertook construction programs  
3 to assure there was sufficient and reliable capacity over  
4 long term. These costs were incurred by the respective  
5 utilities to fulfill their retail franchise obligations to  
6 serve customers directly with the understanding that  
7 competing entities would not provide direct retail service,  
8 and that there would be a fair opportunity to recover the  
9 prudent investments that had been made. Under traditional  
10 ratemaking, the costs of long-term investments were spread  
11 over their estimated useful service lives, with the intent  
12 of properly synchronizing cost recovery with ratepayer  
13 benefit. In connection therewith, there was a reasonable  
14 expectation that utilities would be given a fair opportunity  
15 to recover all such capital costs. In order to correctly  
16 compute stranded costs, it is critical to consider the  
17 expected remaining service and cost recovery periods that  
18 are associated with such assets and that have been reflected  
19 in the ratemaking process. Imposing some limit on the  
20 period for quantifying stranded costs may not only deny the  
21 affected utilities a reasonable opportunity for full cost  
22 recovery, but may also deny ratepayers the potential  
23 benefits of recognizing the declining net rate base  
24 investments occurring over time. Accordingly, it is my  
25 belief that, in quantifying stranded costs, the remaining  
26 service lives of the affected assets implicit in rates be  
27 considered.

Recovery  
Time Frame

1 Q. Over what period should stranded costs be recovered?

2 A. In addressing this issue, it is assumed that, unlike  
3 wholesale stranded costs which are recovered via an exit  
4 fee to departing customers, retail stranded costs will be  
5 recovered through an on-going wires charge. The length of  
6 the recovery period is primarily a function of the size of  
7 the stranded investment to be recovered, the number of  
8 parties from whom it will be recovered, and the extent to  
9 which the parties are interested in concluding the  
10 transition period as rapidly as possible. Basically, the  
11 longer the recovery period, the smaller the periodic charge  
12 but the greater uncertainty and delay until retail  
13 competition is fully achieved. Conversely, the shorter the  
14 recovery period, the greater the charge, but also the  
15 greater likelihood of recovery and more rapid completion of  
16 the transition to full retail competition. Whatever, the  
17 recovery period ultimately determined as appropriate by this  
18 Commission, it should be sufficiently long to provide the  
19 affected utilities a reasonable opportunity to recover  
20 their stranded costs.

21

22 The other states addressing stranded cost recovery in  
23 connection with electric industry restructuring have  
24 established recovery periods generally ranging from five  
25 to ten years. Considering all relevant factors, I recommend  
26 a recovery period of ten years, but would not be strongly  
27 opposed to a period as short as five years.

Stranded Cost  
Payment Responsibility

1 Q. From whom should stranded costs be recovered?

2 A. Among the critical elements of any stranded cost recovery  
3 plan are the parties to whom such charges will be levied  
4 and the type of charge mechanism to be used. As stated,  
5 in their present form, the Electric Competition Rules  
6 provide for stranded cost recovery only from those utility  
7 customers taking competitive power (R14-2-1607.J). No  
8 specific guidance is given for the type of charge to be  
9 used for stranded cost recovery. Rule R14-2-1607.H permits  
10 an affected utility to request Commission approval of  
11 "distribution charges or other means of recovering  
12 unmitigated stranded costs from customers..." I believe  
13 all customers should bear some responsibility for stranded  
14 costs and that the proper recovery mechanism is a non-  
15 bypassable, across-the-board, end user wires charge that  
16 reflects the true nature of underlying stranded costs. I  
17 would not object, however, to some distinction being made  
18 between the stranded cost charge to be assessed the parties  
19 using competitive power, and those customers remaining as  
20 standard offer customers, recognizing that the latter are  
21 already paying stranded costs through their service rates.

22

23 Q. Why do you believe that all customers should bear some  
24 stranded cost responsibility?

25 A. I believe that all customers should bear some responsibility  
26 for stranded costs for two reasons. First, the major driver  
27 for the move to implement retail competition is lower rates

1 for everyone in the long run. Electric restructuring is  
2 perceived to bring overall benefits to society in general,  
3 through improved efficiency in the industry and prices that  
4 more closely reflect true marginal costs. If it is truly  
5 believed that all consumers will ultimately benefit from  
6 the introduction of retail competition, then all consumers  
7 should bear some responsibility for stranded costs. This  
8 theory is consistent with the manner in which responsibility  
9 for stranded costs was spread in the deregulation of the  
10 natural gas pipeline industry, and is the way that certain  
11 portions of the costs of the local telephone loop plant,  
12 previously assigned to the interstate jurisdiction prior  
13 to deregulation of the long distance telecommunications  
14 business, are now recovered via subscriber line charges  
15 assessed to all end users, irrespective of whether they  
16 initiate or receive any long distance calls. This approach  
17 is also used in the property tax mechanisms in many states  
18 whereby some portion of all citizens' tax payments support  
19 the public schools, whether or not the taxpayers actually  
20 have or have had children attending school. The perceived  
21 overall benefit of free public education to society in  
22 general warrants such broad-based cost support.

23  
24 I also believe that stranded costs should be recovered from  
25 all consumers for economic reasons. Those customers opting  
26 to procure competitive power may not see some or all of the  
27 benefits of competition in their final electric bills, if  
28 they bear the entire burden for stranded costs. To the  
29 extent that stranded costs are fully recoverable, and the

1 period for their recovery is shorter than the horizon over  
2 which they were quantified, and recovery is permitted only  
3 from parties taking competitive power, the amounts paid by  
4 the latter, including the stranded cost charge, may actually  
5 exceed amounts paid by standard offer customers paying  
6 regulated rates with no additional stranded cost obligation.  
7 For example, assume a host utility has a bundled rate of 10  
8 cents per kWh, comprised of 5 cents for generation and 5  
9 cents for delivery. Further assume that competitive power  
10 is available for 3 cents per kWh. To the extent that the  
11 applicable stranded cost charge is greater than the 2 cent  
12 differential between the power cost of the host utility and  
13 competitive power, there is no economic incentive for the  
14 customers of the host utility to take the competitive power.  
15 The alternative source price per kWh (3 cents generation +  
16 5 cents delivery + the stranded cost charge) would exceed  
17 the 10 cent price currently available. A key reason why  
18 this may occur is illustrated by the simple example of an  
19 8 percent \$100,000 mortgage loan. With a thirty-year term,  
20 the monthly payment is \$734. That increases to \$956 when  
21 the term is reduced to fifteen years. With any cost recovery  
22 scenario, as the period for recovery is shortened, and all  
23 other factors held constant, the annual recovery amount will  
24 always increase.

25  
26 To the extent that consumers of competitive power will not  
27 be able to realize the full economic benefit of changing  
28 power suppliers, there will be an economic disincentive to  
29 leave their host utility. True competition can only occur



1 at the margin. Whatever ultimately may be the stranded cost  
2 mechanism approved by this Commission, it is critical that  
3 it be designed to promote efficient competition, meaning  
4 that all suppliers must compete on the basis of their  
5 marginal costs, and such supplier differences be reflected  
6 in the prices paid by consumers. It is clear that the true  
7 benefits of retail competition can only be realized if all  
8 consumers are required to participate in stranded cost  
9 recovery. It is apparent that R14-2-1607.J must be amended  
10 to broaden the base for stranded cost recovery to include  
11 all consumers for whom utilities made long-term commitments  
12 in connection with the traditional obligation to serve.  
13

14 Q. Should new customers bear an obligation for stranded costs?

15 A. Yes, I believe they should. They should pay their fair share  
16 as though they had been served all along. The affected  
17 utilities have traditionally planned their systems to  
18 accommodate customer growth. Moreover, an incentive should  
19 not be created for customers to attempt to bypass stranded  
20 cost obligations by trying to appear as though they are a  
21 "new" customer.  
22

23 Q. Should departing customers be charged for stranded costs?

24 A. To the extent they are truly physically leaving the area  
25 served by the host utility, they should bear no further  
26 stranded costs. Effects of routine customer departures have  
27 traditionally been considered in utilities' generation  
28 planning processes. The impact of such departures will, to  
29 a certain extent, be offset by new customers of the utility

1       who will assume their respective share of stranded costs.

2       Moreover, the departing customers will likely be subject to  
3       stranded cost charges by the incumbent utility in the new  
4       area to which they relocate.

5  
6       Q.   What about customers that opt to self-generate?

7       A.   R14-2-1607.J states that reductions of electricity sales due  
8       to customers self-generating shall not be used to calculate  
9       or recover stranded costs. I believe that the Rule should  
10      be amended to require some stranded cost compensation from  
11      those customers who decide in the future to self-generate.  
12      Self-generation may be a way some parties choose to bypass  
13      their stranded cost responsibility. It could also lead to  
14      economically perverse results. If, for example, the host  
15      utility has marginal costs of 4 cents per kWh and a stranded  
16      charge of 5 cents per kWh, the customers may opt to self-  
17      generate at a marginal cost of 7 cents--3 cents above the  
18      utility's marginal cost. That type of uneconomic bypass  
19      would result in an overall efficiency loss. To eliminate  
20      any incentive for stranded cost bypass, the charge should be  
21      made recoverable from all customers, including those that  
22      elect self-generation.

23  
24      There are two ways that may be used for collecting stranded  
25      costs from customers opting to self-generate. First, many  
26      such customers will continue to purchase emergency, back-up  
27      power from the host utility. In such circumstances, the  
28      customer's allocated share of stranded costs could be  
29      incorporated as part of the standby service charge. Second,

1       it may be possible to recover stranded costs from customers  
2       that depart to self-generate through some form of exit fee.

3  
4       Q.   Should those parties currently served under interruptible  
5       rates and special contracts be obligated to compensate their  
6       host utility for some portion of the stranded costs?

7       A.   These customers present an interesting situation. By  
8       definition, interruptible customers go off-line at times  
9       of high system demand. They are billed under rates based  
10      upon the full cost of service, less some credit to represent  
11      the higher peaking capacity costs the utility avoids when  
12      such customers' service is suspended. With respect to the  
13      special contract customers, under this Commission's current  
14      policy, such customers must have economically viable power  
15      supply alternatives. By signing the special contracts, they  
16      agree to remain with their host utility, and benefit by  
17      receiving certain rate concessions. Their special rates  
18      reflect all variable costs, plus some contribution toward  
19      fixed costs. Other customers benefit as well, by not having  
20      their rates increase to cover the lost margins that would  
21      result due to customer departures, absent such agreements.  
22      Clearly, the stranded cost implications for interruptible  
23      and special contract customers are different from those of  
24      full service, firm customers.

25  
26      I believe that a distinction should be made with respect to  
27      interruptible customers such that they bear somewhat reduced  
28      stranded cost charges, depending on the specific manner in  
29      which the costs of serving such customers are determined and

1 reflected in the resulting rates. Utility generation  
2 capacity planning and service requirements for this class of  
3 customer are less than those associated with firm service  
4 customers. As a result their stranded cost burden for  
5 capacity-related costs should be less. On the other hand, I  
6 do believe that interruptible customers should be assigned  
7 full responsibility for energy-related stranded costs.

8  
9 With respect to special contract customers, it is my belief  
10 that they should, as a group, be assigned their fair share  
11 of the stranded cost burden, but the ultimate recovery  
12 thereof should be a matter for negotiation between the  
13 respective parties. The remaining body of ratepayers should  
14 not be burdened with any portion of the stranded costs  
15 allocable to, but not recoverable from, this group of  
16 customers.

17  
18 Q. For purposes of developing a stranded cost charge mechanism,  
19 on what basis should costs be allocated between regulatory  
20 jurisdictions and between customer classes?

21 A. Stranded costs should be allocated jurisdictionally and to  
22 customer classes in a manner consistent with the respective  
23 utility's current ratemaking treatment of the actual costs  
24 themselves. This should affect a recovery of stranded costs  
25 in relatively the same proportions as cost recovery would  
26 have been expected to be achieved under a continuation of  
27 regulation. This approach to allocation has been adopted  
28 by several of the states considering electric restructuring.

1 Q. What mechanism should be used for billing and recovering  
2 stranded costs?

3 A. I believe the most appropriate mechanism for billing and  
4 recovering stranded costs is a non-bypassable, across-the-  
5 board end user wires charge with both energy and demand  
6 components. This is consistent with sound economic  
7 principles and reflects the underlying nature of the  
8 stranded costs.

True-up of  
Stranded Cost Estimates

9 Q. Should there be a periodic true-up of the utilities'  
10 estimates of stranded costs?

11 A. Yes, there most certainly should be a periodic reexamination  
12 of administratively determined stranded costs. Presently,  
13 the Electric Competition Rules provide for the possibility  
14 of such reconsideration. R14-2-1607.L states that the  
15 Commission may order regular revisions to the estimates. I  
16 believe the Rules should be amended to require periodic  
17 true-ups and corresponding revisions to the stranded cost  
18 charges throughout the recovery period. While the  
19 calculation methodology and estimates of stranded costs  
20 could be agreed upon before retail competition begins,  
21 the actual calculations and associated charges would be  
22 determined on a periodic basis reflecting realizations of  
23 the relevant variables. Initially, this could be annually,  
24 but as experience and confidence in the quantification  
25 process is gained, the frequency could be extended.

26  
27 Q. Why do you believe there should be a periodic true-up?

1     A.    There is considerable uncertainty in attempting to quantify  
2           stranded costs. The process is based on a number of factors  
3           that, at this point, are nearly impossible to predict. It  
4           is pure speculation to project what the markets and prices  
5           for power will be in the future. To the extent estimates of  
6           stranded costs are overstated, utility shareholders will be  
7           unjustly enriched and consumers will be economically  
8           detrimented. If the quantifications are understated, the  
9           opposite effects on these stakeholders will occur.

10  
11          Clearly, the most significant variable in quantifying  
12          stranded costs is the market clearing price for power. It  
13          is implicit in every computational methodology, both  
14          administrative and market-based. It is based on a variety of  
15          factors including customer demand, market structure, new  
16          accounting and tax rules, generation and fuel mix,  
17          generation and transmission capacity, the level of interest  
18          rates and inflation, advances in technology, and new  
19          laws and governmental regulations. At this point, trying to  
20          forecast the market price for power over the stranded  
21          cost calculation horizon would probably be as much as or  
22          more difficult than trying to guess the price of a single  
23          stock on the New York Stock Exchange throughout that same  
24          period. An example of the risks in trying to estimate the  
25          prices and costs of electricity can be seen in the problems  
26          encountered in New York and California as the regulators in  
27          those states made determinations and rulings in connection  
28          with QF power under the requirements of PURPA. Many of the  
29          stranded costs of electric utilities in those states can be

1 attributed to such errors in estimation.

2  
3 I believe that a periodic true-up is necessary to assure  
4 that electric restructuring in Arizona is carried out in a  
5 manner that protects the public interest. Such a revisiting  
6 does not have to guarantee a dollar-for-dollar recovery  
7 (regulation never did that), but at a minimum should enable  
8 prospective adjustments of the stranded cost charge to  
9 reflect changes in major uncontrollable variables, for the  
10 protection of both consumers and utility investors.

Price Caps  
and Rate Freezes

11 Q. Should price caps and rate freezes be a part of the stranded  
12 cost recovery program?

13 A. Although I am aware that other states addressing retail  
14 electric competition are considering price caps and rate  
15 freezes as a part of their overall plan, I am taking no  
16 specific position on whether this Commission should adopt  
17 them for Arizona. However, I do wish to comment on the  
18 matter.

19  
20 In the Stranded Cost Working Group meetings, several of the  
21 participants stated their preference for a price cap or rate  
22 freeze. No one, however, offered any substantive details as  
23 to how such a plan should be developed, implemented, or  
24 operated. For example, what rates should be frozen or  
25 capped--the total price for service, or just the  
26 distribution portion? In the competitive environment,  
27 generation will be deregulated, transmission will

1 essentially be totally FERC-regulated, leaving only  
2 distribution service for the ACC to regulate. Does the  
3 Commission have the continuing authority to include  
4 generation and transmission service in a price cap or rate  
5 freeze if they no longer regulate those business  
6 segments? Does a price cap or rate freeze comport with the  
7 Commission's responsibility to provide utilities under its  
8 jurisdiction a reasonable opportunity to recover the cost of  
9 providing service. I believe that any party advocating  
10 price caps or rate freezes should be required to answer  
11 these and other questions and supply all of the relevant  
12 details of their proposal.

#### Mitigation of Stranded Costs

13 Q. What do the Rules say about mitigation of stranded costs?

14 A. R14-2-1607.A requires the utilities to take every feasible,  
15 cost-effective measure to mitigate stranded costs, and cites  
16 expanding markets or the scope of their service offerings as  
17 examples of mitigation techniques. I totally agree.

18  
19 Q. What factors should be considered for the mitigation of  
20 stranded costs?

21 A. In considering mitigation, it is important to note that  
22 many stranded costs are obligations or sunk costs which, by  
23 definition, cannot be mitigated. They can only be  
24 reallocated, or offset by additional revenues. Accordingly,  
25 many mitigation proposals are merely targeted to shift the  
26 cost responsibility between utility investors, consumers,  
27 taxpayers, wheeling customers, or independent power



1 producers. As a result, not all mitigation strategies  
2 being advanced are necessarily based on considerations of  
3 fairness or equity when the ultimate bearer of this  
4 financial responsibility is identified.

5  
6 Mitigation can be achieved in two principal ways: cost  
7 reduction and containment efforts and revenue enhancement  
8 strategies. Mitigation can occur when affected utilities  
9 reduce generation and operating costs to be more in line  
10 with those of the market. This may be accomplished by  
11 reducing operating costs (both labor and non-labor) via  
12 productivity and efficiency gains, and by repowering or  
13 retrofitting existing plants and replacing inefficient  
14 generating units and equipment as well as making changes  
15 that facilitate fuel switching. Another mitigation tool  
16 available is the renegotiation or buy-out of above market,  
17 or otherwise uneconomic, fuel, transportation, or purchased  
18 power contracts.

19  
20 Stranded cost mitigation may also occur when affected  
21 utilities are able to generate additional revenue sources.  
22 Such efforts may include the development of new energy sales  
23 opportunities at prices above the respective utility's  
24 actual variable fuel and O&M costs, the sale of existing  
25 owned capacity and purchased capacity rights, and the sale  
26 of emission (SO<sub>2</sub> and NO<sub>x</sub>) credits. Utilities with  
27 substantial transmission capacity will find marketing to be  
28 a more effective strategy than will utilities without such  
29 interconnection possibilities.

1 I believe an important distinction must be made with respect  
2 to revenue enhancement as a mitigation tool. To the extent  
3 that additional revenues are derived from the generation  
4 assets or other resources which underlie the revenue  
5 requirements upon which current regulated rates are based,  
6 they may be considered as being available for mitigating  
7 stranded costs. Revenues derived from assets and other  
8 resources that are currently non-jurisdictional or non-  
9 utility, and for which the utility shareholders are at  
10 risk, should not be used as an offset to stranded costs.

11  
12 A third way that stranded costs may be mitigated is through  
13 accelerated depreciation of generation assets or accelerated  
14 amortization of regulatory assets. Unless, however such  
15 accelerated expense recognition is accompanied by  
16 commensurate cost recovery, this exercise is not mitigation,  
17 it is merely a transfer of wealth from utility investors to  
18 consumers. A way for this technique to achieve true  
19 mitigation is through the use of some type of rate freeze  
20 (such as has been done with nuclear assets in California) or  
21 a negotiated earnings sharing agreement between an affected  
22 utility and its regulators (similar to that which exists  
23 between APS and the ACC). In either case, overall costs of  
24 service may be declining and a portion of the savings are  
25 offset by the accelerated expense recognition rather than  
26 flowing the savings in their entirety back to ratepayers.

27  
28 The stranded cost burden can also be reduced through time.  
29 By delaying the introduction of competition, the utilities

1 will be able to continue recovering all of their stranded  
2 costs through bundled full service rates. As capital  
3 investments in generation assets continue to be recovered  
4 through depreciation charges, there will be a reduced,  
5 yet-to-be recovered amount at the time competition is  
6 ultimately introduced. I mention this for information  
7 purposes only; it is not my recommendation to change the  
8 scheduled January 1, 1999 implementation date. I would,  
9 however, not be opposed to such a postponement if it would  
10 mean a more efficient and equitable move toward competition.  
11

12 As stated, I strongly believe that the affected utilities  
13 have an obligation to take every reasonable measure to  
14 mitigate stranded costs. However, because the  
15 circumstances of what constitutes reasonable and prudent  
16 mitigation efforts can be expected to vary widely between  
17 companies, a generic approach for analysis should be  
18 avoided. Mitigation efforts should be evaluated on a  
19 case-by-case basis. It is also important to note that  
20 mitigation efforts themselves are not without costs; they  
21 may generate additional stranded costs. Therefore, I  
22 believe the Electric Competition Rules should be  
23 amended to permit each affected utility to independently  
24 demonstrate that their mitigation efforts were reasonable  
25 and cost beneficial, based on all relevant facts and  
26 circumstances. In addition, amounts prudently spent in  
27 connection with mitigation efforts should be included in  
28 the balance of recoverable stranded costs.

Source of the  
Market Clearing Price

1 Q. How should the market clearing price be determined?

2 A. As stated the market clearing price for power is the most  
3 critical and sensitive variable used in computing stranded  
4 costs. Other states are using various measures for the  
5 market price. As California begins its foray into retail  
6 electric competition, the utilities in that State will use  
7 2.4 cents per kWh as the initial market price for computing  
8 stranded costs in 1998. That represents the estimated  
9 short-run avoided costs for the year and will be trued-up  
10 at a later date. Ultimately the price on the spot market  
11 known as the California Power Exchange will be used once  
12 that market is firmly established. In Michigan, the  
13 utilities will use an average price based on regional cost  
14 data from the Michigan Electric Coordinated System. Such  
15 price estimates are required to be trued up annually.

16  
17 One likely source of a market price available for Arizona  
18 is the Dow Jones Palo Verde Electricity Index. I believe,  
19 however, that such an index may not be totally reliable for  
20 the long run. Factors such as substantial excess  
21 generating capacity in the Southwest and effects of new  
22 participants trying to establish a foothold in the market  
23 may produce pricing trends that may be unrepresentative and  
24 and likely unsustainable in the long run.

25  
26 In establishing a market clearing price for purposes of  
27 quantifying stranded costs in Arizona, a key consideration

1 is whether an ex post make-whole adjustment to actual is  
2 part of any true-up process. While a total make-whole  
3 process may be inappropriate (regulation provided only an  
4 opportunity to recover all costs, not a guarantee) due to  
5 the extreme difficulty in projecting the market clearing  
6 price, I believe that strong consideration should be given  
7 to adjusting stranded cost recovery to eliminate the effects  
8 of errors in estimating the market clearing price. To the  
9 extent such an adjustment is allowed, the actual market  
10 price could be determined by summing all electric revenues  
11 for capacity and energy in Arizona during the measurement  
12 period, and dividing the result by actual kWh sales during  
13 that same time frame.

Accounting  
Issues

14 Q. Does the issue of stranded cost quantification and recovery  
15 raise any significant accounting implications.

16 A. Industry restructuring and the stranded costs likely to  
17 result therefrom have significant accounting implications.  
18

19 Q. What are the accounting implications?

20 A. An assessment of the accounting implications associated with  
21 stranded costs must first begin with an understanding of the  
22 unique nature of accounting principles and practices used in  
23 the public utility industry. In most instances, the same  
24 accounting principles that apply to businesses in general  
25 also apply to public utilities. The differences that exist,  
26 however, are significant and are totally attributable to the  
27 traditional process whereby utility rates are based on the

1 costs of providing service. By having the power to determine  
2 the costs upon which rates are based, regulators can create  
3 economic impacts that must be appropriately considered in  
4 utility accounting and financial reporting. The accounting  
5 used by utilities has evolved over the years, and gained  
6 widespread acceptance by accounting standards setters,  
7 governmental agencies, regulators, and the financial  
8 community.

9  
10 The key accounting standard affecting utilities is  
11 Statement of Financial Accounting Standards No. 71,  
12 "Accounting for the Effects of Certain Types of Regulation,"  
13 ("SFAS No. 71"), which defines a regulated entity and  
14 contains standards that must be complied with in preparing  
15 financial statements issued by public utilities. All of the  
16 affected utilities in this proceeding keep their books in  
17 accordance with SFAS No. 71.

18  
19 Under SFAS No. 71, the most important difference between  
20 the accounting used by regulated utilities and unregulated  
21 businesses is the ability of regulators to create assets  
22 ("regulatory assets") by deferring to future periods (and  
23 therefore recoverable in future rates) costs which would  
24 otherwise be charged to expense in the current period.  
25 With their legal authority to identify the types and amounts  
26 of costs to be recoverable in rates, regulators have  
27 traditionally been able to provide the necessary level of  
28 assurance through rate orders that any amounts ordered to  
29 be deferred for ratemaking purposes meet the criteria to

1 be reported as assets in published financial statements.  
2 Many of the stranded costs of utilities are such regulatory  
3 assets.

4  
5 Other utility industry specific accounting standards have  
6 been issued by the Financial Accounting Standards Board  
7 ("FASB") in response to concerns over the financial  
8 implications of non-traditional ratemaking practices. SFAS  
9 No. 90, issued in 1986, addressed the proper accounting for  
10 costs associated with cancelled power plant projects, while  
11 SFAS No. 92, issued in 1987, dealt with accounting for plant  
12 costs deferred for future rate recovery under commission-  
13 approved phase-in plans.

14  
15 With the emergence of competition and deregulation in the  
16 utility industry, many of the companies discovered they no  
17 longer met the criteria set forth in SFAS No. 71 to continue  
18 to be characterized as a "regulated enterprise" for  
19 accounting purposes. In response thereto, in 1988 the FASB  
20 issued SFAS No. 101, "Accounting for Discontinuation of  
21 Application of SFAS No. 71." The thrust of this new standard  
22 is that, when an enterprise ceases to meet the criteria of  
23 SFAS No. 71, it must discontinue its application, and remove  
24 from its books of account the effects of actions by  
25 regulators that would not have been recorded by enterprises  
26 in general. Typically, that means writing off all recorded  
27 regulatory assets and liabilities.

28  
29 In 1995, an additional accounting standard having stranded

1 cost implications was issued by the FASB. SFAS No. 121,  
2 "Accounting for the Impairment of Long-Lived Assets and for  
3 Long-Lived Assets to be Disposed Of" addressed concerns that  
4 arose within the accounting profession and in the financial  
5 community, particularly with respect to reported assets of  
6 utilities, given the extent to which deregulation and  
7 restructuring was occurring in the industry. SFAS No. 121  
8 lists certain events (including a significant change in the  
9 regulatory climate in which a company operates), the  
10 occurrence of which requires the company to consider whether  
11 any of its assets may have been impaired. For this purpose,  
12 the carrying amount of the affected asset must be compared  
13 to the expected future undiscounted value of related net  
14 cash flows. If the recorded amount exceeds the projected  
15 cash flows, then asset impairment must be recognized and the  
16 book value of the asset reduced to its fair market value.

17  
18 Any inquiry into stranded costs quantification and recovery  
19 must consider the requirements and effects of SFAS No. 71,  
20 101, and 121. The major potential threat to the affected  
21 utilities of being forced to go off of SFAS No. 71 would be  
22 that they immediately write-off all generation-related  
23 regulatory assets. Then, to the extent that the generating  
24 assets are impaired, further write-offs would be required  
25 under SFAS No. 121.

26  
27 As the electric utility restructuring efforts proceed, it  
28 has become patently obvious that, as written, SFAS No. 71  
29 did not fully contemplate the direction that deregulation



1 and competition are taking today. Notwithstanding the  
2 direction and guidance existing under SFAS No. 71, 90, 92,  
3 101 and 121, there has been considerable uncertainty raised  
4 in connection with many of the restructuring plans being  
5 considered. Some of the questions being raised include:

6 a) When does a utility go off SFAS No. 71--  
7 upon the announcement of a date certain,  
or on that date certain?

8 b) May a stranded cost that would otherwise  
9 have to be written off under SFAS Nos. 101  
or 121, continue to be reported as an asset  
10 if its recovery will be allowed as part of  
billings for distribution service?

11  
12 In May 1997, the Emerging Issues Task Force of the FASB  
13 agreed to consider these issues as part of an inquiry into  
14 entities facing deregulation, specifically, the three major  
15 electric utilities in California. In August, EITF 97-4  
16 concluded that companies should discontinue using SFAS No.  
17 71 for business segments when legislation or a regulatory  
18 decision is issued that contains sufficient detail to  
19 reasonably determine how a transition plan will affect the  
20 deregulated portion of the business. In addition, it  
21 concluded that regulatory assets and liabilities may remain  
22 on the regulated books of account if they will be collected  
23 through cash flows (i.e. stranded cost charges) of the  
24 business segments continuing to be regulated.

25  
26 At this point, I believe the Electric Competition Rules lack  
27 the specificity that would require the affected utilities to  
28 discontinue following SFAS No. 71. Sufficient support  
29 exists through EITF 97-4. I do believe, however, that as

1 soon as the Rules contain sufficient information for  
2 utilities to make the required assessments of deregulation  
3 as contemplated under EITF 97-4 (perhaps when they are  
4 amended as a result of this evidentiary proceeding) the  
5 companies will have to go off of SFAS No. 71. I have  
6 discussed this matter with and provided copies of the Rules  
7 and the report of the Stranded Cost Working Group to certain  
8 members of the AICPA Public Utility Committee and the NARUC  
9 Subcommittee on Accounts and all concur with my assessment.

10  
11 Based on the foregoing, the potential adverse impact on the  
12 affected utilities of less than a full opportunity to  
13 recover their stranded costs is obvious. Not only do the  
14 Rules have to clearly provide that opportunity, but also  
15 should include specificity with respect to quantification  
16 methods and recovery mechanisms that provide the required  
17 degree of assurance of recovery necessary, in order to avoid  
18 the companies having to suffer significant write-offs  
19 against retained earnings, unnecessarily. Expanding the base  
20 from whom stranded costs will be recovered and including a  
21 periodic true-up mechanism are examples of ways to raise the  
22 degree of assurance of stranded cost recovery.

23  
24 Q. Are there other stranded cost accounting issues?

25 A. Yes. There are several potential stranded cost accounting  
26 issues for which there exists little direction in the  
27 FASB accounting standards. Moreover, specific accounting  
28 guidance from the FERC with respect to the proper accounting  
29 for stranded costs or related revenues has been relatively

1       sparse. For example, uncertainty exists with respect  
2       to the manner in which stranded cost recovery revenues  
3       may be applied to specific costs, and in the way that a  
4       generating plant should be depreciated when it is expected  
5       to be operated for its full remaining physical life, which  
6       is far in excess of the established stranded cost recovery  
7       period. Another unresolved issue is an on-going inquiry  
8       by the FASB into accounting for liabilities related to the  
9       closure or removal of long-lived assets. This is relevant to  
10      both nuclear decommissioning costs and costs of removing  
11      fossil plants at the end of their respective service lives.

12  
13      I believe that the affected utilities should be required to  
14      include detailed descriptions of their proposed accounting  
15      for stranded costs and related revenues as part of their  
16      stranded cost estimates filed under R14-2-1607.G. Moreover,  
17      the true-up procedure I have previously advocated in this  
18      testimony would afford all parties an opportunity to address  
19      the effects of any new accounting rules or standards  
20      issued subsequent to the commencement of the transition  
21      period.

#### Tax Issues

22    Q.    Do stranded costs raise any tax issues?

23    A.    Yes. The quantification and recovery of stranded costs  
24      create a number of significant tax issues. These include the  
25      manner in which any tax benefits previously "flowed through"  
26      in the ratemaking process and existing deferred tax reserves  
27      and unamortized investment tax credits may be considered in

1 the process of quantifying stranded costs. In addition,  
2 a potentially significant issue exists with respect to  
3 the continuing ability of nuclear utilities to obtain  
4 a current income tax deduction for contributions made  
5 to external decommissioning trust funds.  
6

7 Q. Please describe the "flow-through" issue.

8 A. In many instances certain revenues and expenses are treated  
9 differently for book (ratemaking) and tax purposes. Such  
10 differences may be characterized as either permanent  
11 differences or timing differences.  
12

13 Permanent differences are revenues or expenses that are  
14 considered for either book or tax purposes, but not the  
15 other. Examples of permanent revenue differences include  
16 interest on municipal bonds and the equity component of  
17 AFDC, which are treated as income for book purposes, but not  
18 recognized for tax purposes, and contributions in aid of  
19 construction which are income for tax purposes only. Some  
20 permanent expense differences include lobbying expenses and  
21 portions of the costs of business meals and entertainment  
22 which are recorded expenses on the books, but are not  
23 allowed as tax deductions. Permanent differences affect  
24 only the current accounting period.  
25

26 Timing differences occur when revenues and expenses are  
27 recognized in different accounting years for book and tax  
28 purposes. Over time, the differences completely reverse,  
29 and the cumulative effect on book and tax income is the

1 same. For public utilities, the greatest timing difference  
2 is that which exists with respect to book and tax  
3 depreciation, with the latter reflecting accelerated methods  
4 and shorter lives. Under generally accepted accounting  
5 principles, deferred taxes must be recorded for the effect  
6 of all timing differences. Deferred income taxes offset the  
7 effect of the timing differences reflected in the  
8 calculation of the current income tax expense, thereby  
9 providing a levelizing effect on the total income tax  
10 expense. In ratemaking, the practice of including deferred  
11 income taxes in the cost of service is labeled "tax  
12 normalization." The inclusion of deferred taxes in the cost  
13 of service will initially increase the overall revenue  
14 requirement. As the timing differences reverse, the  
15 opposite will occur. Since deferred taxes are not allowed as  
16 tax deductions, there is a tax-on-tax effect associated with  
17 deferred taxes. Accordingly, with combined Federal-state  
18 tax rate of 40%, the effect of \$1 of deferred taxes is \$1.67  
19 in revenues.

20  
21 While generally accepted accounting requires deferred taxes  
22 to be recognized for all book-tax timing differences, that  
23 is not necessarily the case in utility ratemaking. Except  
24 for certain depreciation-related timing differences that the  
25 Internal Revenue Code and IRS Regulations require to be  
26 normalized, regulators have had the liberty to include in  
27 ratemaking only the deferred taxes they felt appropriate.  
28 In many instances, they did not allow deferred taxes to be  
29 recognized for some timing differences that produce larger

1 current tax deductions, thereby lower income tax expense and  
2 correspondingly lower annual revenue requirements. When  
3 certain timing differences are considered in computing the  
4 income taxes in ratemaking, but deferred taxes are not  
5 allowed, the benefits of the timing differences are said  
6 to be "flowed-through" to ratepayers.

7  
8 Because the effects of timing differences reverse over time,  
9 the tax benefits flowed through in the past in the form of  
10 lower utility service rates, will become greater tax  
11 liabilities and increased revenue requirements in the  
12 future. There is an implicit promise in the "flow-through"  
13 ratemaking methodology that, when the higher tax obligations  
14 arise in the future, the affected utility will be allowed to  
15 recover such increased costs in rates.

16  
17 Over the years, the ACC has required most of the utilities  
18 under its jurisdiction, including all of the affected  
19 utilities in this proceeding that are tax-paying entities,  
20 to flow-through some tax benefits in ratemaking. The  
21 companies' ability to recover the higher future taxes  
22 that will result as the timing differences reverse, will  
23 disappear as soon as they are required to compete in a  
24 competitive market, and the Commission is no longer setting  
25 rates for the deregulated business segments. As I stated  
26 previously in this testimony, the affected utilities should  
27 be permitted to include in their stranded cost estimates all  
28 generation-related, previously flowed-through, but yet-to-be  
29 recovered, deferred taxes.

1 Q. Please explain the issue dealing with the use of deferred  
2 tax reserves and unamortized tax credits in the process of  
3 quantifying stranded costs.

4 A. As very capital-intensive entities, public utilities have  
5 received significant tax benefits through the use of  
6 accelerated tax depreciation and the investment tax credit.  
7 Accelerated depreciation enables taxpayers to depreciate  
8 assets for tax purposes more rapidly than for book purposes,  
9 thereby lowering tax liabilities in the early years of an  
10 asset's service life. The investment tax credit permitted  
11 taxpayers a permanent reduction in their tax liabilities,  
12 based on a percentage of amounts spent for the acquisition  
13 of certain classes of plant and equipment.

14  
15 The intent of the Congress in creating the benefits of  
16 accelerated depreciation and the investment tax credit was  
17 to encourage taxpayers to make capital investments, thereby  
18 creating jobs and stimulating the economy, through both  
19 lower current income taxes or the permanent forgiveness of  
20 tax. In the early years of their existence, there were no  
21 ratemaking rules or restrictions placed on regulators,  
22 limiting or directing their treatment of such benefits in  
23 utility ratemaking. As a result, many regulators immediately  
24 flowed the benefits through to ratepayers in the form of  
25 lower service rates.

26  
27 As the trend toward such "flow-through" expanded during the  
28 1960s, the Congress became alarmed that it would thwart the  
29 purpose for which these benefits were created by depriving

1 utilities tax of benefits available to other taxpayers,  
2 reducing Federal tax receipts due to the reductions in the  
3 utilities' gross revenues and taxable income, and failing to  
4 match fairly the tax benefits arising from capital asset  
5 expenditures to the ratepayers who actually bore the  
6 capital costs in rates. This resulted in the enactment of  
7 legislation now incorporated into the Internal Revenue Code  
8 and IRS Regulations that severely restrict the ability  
9 of regulators to flow-through tax benefits associated with  
10 accelerated depreciation and investment credit in utility  
11 ratemaking.

12  
13 Deferred taxes associated with timing differences arising  
14 due to accelerated depreciation methods and shorter tax  
15 lives must be recognized in ratemaking. The deferred taxes  
16 must be included in tax expense, and the corresponding  
17 accumulated deferred tax reserve may either be deducted from  
18 rate base or reflected in capital structure at a zero cost  
19 for rate-of-return purposes. The ratemaking treatment  
20 afforded deferred taxes relating to any book-tax timing  
21 differences other than accelerated methods and shorter lives  
22 for depreciation are not covered by the IRS Rules of laws.

23  
24 Utilities have traditionally accounted for the investment  
25 tax credit by deferring it on their balance sheets, and  
26 then amortized it as a reduction of income tax expense  
27 over the lives of the assets that gave rise to the credit.  
28 The IRS Rules and tax laws require a sharing of the credit.  
29 In connection therewith, utilities must elect either of two



1       ratemaking options. Under Option No. 1, the unamortized  
2       balance of the credit is deducted from rate base, but the  
3       annual amortization amount is recorded "below-the-line," and  
4       may not be treated as a reduction of income tax expense for  
5       ratemaking. Under Option No. 2 (that which is most common  
6       in the utility industry), the amortization of investment tax  
7       credit is used to reduce income tax expense for ratemaking,  
8       but the unamortized balance is not deducted from rate base.

9  
10      One issue arising in other states assessing retail electric  
11      competition, and one that could appear here, is the proper  
12      treatment of the deferred tax balances and unamortized tax  
13      credits in calculating stranded costs. I believe that  
14      such amounts may be considered as offsets to related  
15      stranded capital costs, but the Internal Revenue Code and  
16      IRS Rules clearly require that there must be a proper  
17      synchronization of these tax benefits with specific stranded  
18      costs to which they relate. To the extent any portion of the  
19      capital cost of a stranded asset is excluded in the  
20      calculation, there must be a corresponding reduction in the  
21      offset provided by the related tax benefits.

22  
23      I base my opinion with respect to deferred tax reserves on  
24      the "consistency requirement" in Code Section 168 (i)(9)(B).  
25      It requires that a ratemaking authority (i.e. the A.C.C.)  
26      use an estimate or projection of a regulated company's  
27      income tax expense, depreciation expense, and balances of  
28      accumulated deferred taxes that are all consistently  
29      determined with respect to each other and with respect to

1 rate base. A similar consistency requirement exists for  
2 investment tax credit in Code Section 46 (f)(10). Basically,  
3 these serve to limit regulators' ability to consider the  
4 deferred tax reserves and unamortized tax credits to the  
5 extent the related capital costs are considered.

6  
7 Although I am not aware of any specific IRS guidance on this  
8 offset issue in dealing with stranded costs, during the past  
9 few years there have been a number of IRS Private Letter  
10 Rulings addressing the ability to consider offsets in other  
11 circumstances, such as with public utility phase-in plans,  
12 plant cost disallowances, and assets removed from the scope  
13 of regulation. In all instances, the IRS found that, when  
14 any such capital cost adjustment is made to regulated rate  
15 base, a corresponding adjustment must be made to the related  
16 tax benefits. Although technically, Private Letter Rulings  
17 may not be cited as precedents, they are nevertheless useful  
18 in showing the IRS position on certain issues. In addressing  
19 this position, the IRS has been totally consistent.

20  
21 Q. What is the issue with respect to the tax deduction  
22 for nuclear decommissioning?

23 A. The costs of dismanteling and removing power plants at  
24 the end of their service lives are recovered as a component  
25 of book depreciation expense. For tax purposes, however,  
26 tax deductions for removal costs are generally only allowed  
27 when the removal is occurring and amounts being expended.  
28 The recovery of removal costs in rate revenues with no  
29 corresponding deduction for cost of removal accruals gives

1 rise to higher current tax liabilities and creates a  
2 deferred tax asset during the years the asset is in service.  
3 Decommissioning expense is a type of removal cost, and also  
4 recovered in book expenses over the service life of the  
5 respective nuclear power plant. The principal difference is  
6 the significantly larger cost involved with nuclear plants.

7  
8 The Tax Reform Act of 1986 added Section 468A to the  
9 Internal Revenue Code and provided utilities with nuclear  
10 plants an opportunity to obtain a current tax deduction for  
11 contributions made to external decommissioning trusts. Such  
12 deductions are limited to the lower of the Schedule of  
13 Ruling Amount ("SRA") or the applicable cost of service  
14 amount for the year. An SRA, required to be filed with and  
15 approved by the IRS annually, specifies the maximum annual  
16 payments allowed to be made to the decommissioning fund. It  
17 must be based on the same assumptions used by the applicable  
18 regulators in establishing the amount allowed for inclusion  
19 in cost of service for ratemaking.

20  
21 Deregulation of the generation segment of the electricity  
22 business raises questions about the nuclear utilities'  
23 continuing ability to meet the requirements for the tax  
24 deductibility of payments to external decommissioning  
25 trusts. With the introduction of retail competition and  
26 resulting departure from cost of service ratemaking for  
27 such utilities, it is unclear whether they will continue to  
28 meet the conditions set forth in Internal Revenue Code  
29 Section 468A. For example, on what basis would an SRA be

1 prepared? The inability of the utilities to deduct  
2 decommissioning fund deposits currently could have  
3 significant stranded cost implications.

Stranded Cost  
Recovery

4 Q. Are there any other issues you believe should be addressed?

5 A. Yes. Although I believe the Electric Competition Rules do  
6 contemplate and provide for the recovery of stranded costs,  
7 a number of the participants in the Stranded Cost Working  
8 Group expressed strong reservations against full or partial  
9 stranded cost recovery. Many felt there should be some  
10 sharing of the burden between ratepayers and shareholders,  
11 while others believed no stranded cost recovery should be  
12 allowed. None of the parties offered any substantive  
13 explanation or justification for requiring utility investors  
14 to assume any of the stranded costs. No one provided any  
15 evidence that utility investors have ever been compensated  
16 the higher risks of competition.

17  
18 Q. Do you have a recommendation?

19 A. Yes I do. I believe that the affected utilities should be  
20 provided a reasonable opportunity to recover their stranded  
21 costs. They made the underlying investments and incurred  
22 in good faith the related obligations under a traditional  
23 obligation to serve that was intended to provide a business  
24 environment such that they had a reasonable expectation to  
25 recover the costs of providing safe, reliable, service.  
26 Stranded cost recovery should not, however, be automatic.  
27 The affected utilities have a strong burden of proof with

1       respect to the assets and costs for which recovery is being  
2       requested. They must take all reasonable steps to mitigate  
3       their stranded costs and be prepared to demonstrate they  
4       have not already been compensated therefore in any way.  
5

6       Q.   Does this conclude your testimony?

7       A.   Yes it does.  
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29

## PROFESSIONAL QUALIFICATIONS

Q. What is your educational background?

A. I graduated from the University of Nebraska with a Bachelor of Science Degree in Business Administration, major in Accounting. I also received a Master of Business Administration Degree, concentration in Finance from Rockhurst College in Kansas City, Missouri.

Q. What has been your professional experience?

A. Upon graduation from college in 1968, I was employed by the public accounting firm Arthur Andersen & Co. in its Omaha office. During such employment, I participated in and and directed audits and other engagements involving banks, healthcare facilities, public utilities, insurance carriers, and other clients.

In 1971, I accepted a position reporting to the controller at Central Telephone & Utilities Corporation at its then headquarters in Lincoln, Nebraska. During the five years I was employed by CTU, I directed such activities as financial and regulatory accounting and reporting, internal auditing, budgeting, corporate acquisitions and divestitures, rate case and other regulatory filings, banking relations, and corporate financings.

From 1976 to 1981, I was employed by Kansas City Power & Light Company. My responsibilities included the corporate audit function, operations budgeting, and rate case filings in Kansas and Missouri and with the Federal Energy

1 Regulatory Commission. During that period, I also served as  
2 a member of the Internal Control and Auditing Committee of  
3 the Missouri Valley Electric Association, and the Finance  
4 and Accounting Committee of the Standardized Nuclear Unit  
5 Power Plant System.

6  
7 From 1981 to 1991, I was employed as a Senior Project  
8 Manager for a regulatory consulting firm and successor  
9 firm, directing rate case, management audit, and other  
10 engagements for a clientele that included utility companies,  
11 public service commissions, and intervenors to regulatory  
12 proceedings

13  
14 From 1991 through 1996, I was employed as an internal  
15 consultant with Northern States Power Company in  
16 Minneapolis, Minnesota. My responsibilities included  
17 accounting, taxation, and cost allocation issues in rate  
18 cases and special regulatory proceedings, performing  
19 investment evaluations, accounting and tax research,  
20 developing cost recovery plans, and advising senior  
21 management in connection with the development of  
22 performance-based ratemaking proposals and strategic  
23 policies for competing in a competitive electric utility  
24 industry.

25  
26 In late 1996, I accepted a position as the Tax Research  
27 Coordinator for Tucson Electric Power Company. My main  
28 responsibilities included tax research and planning,  
29 preparation and review of corporate tax returns, and meeting

1 with representatives of tax authorities. I also directed the  
2 team charged with the responsibility for developing and  
3 implementing a system for strategic business unit reporting.  
4

5 In January, 1997 I was appointed Director of Utilities for  
6 the Arizona Corporation Commission. In that capacity, I  
7 directed a staff of approximately ninety professional and  
8 clerical employees responsible for overseeing railroad and  
9 pipeline safety in Arizona and for regulating the water,  
10 telephone, electric, and natural gas distribution utilities  
11 in the State. I resigned from that position in December.  
12

13 Q. What are your professional certificates and qualifications?

14 A. I hold Certified Public Accountant certificates issued by  
15 the Boards of Accountancy in Nebraska and Kansas. I am a  
16 member of the American Institute of Certified Public  
17 Accountants, the National Association of Railroad and Public  
18 Utility Tax Representatives, and the National Association  
19 of Radio and Telecommunications Engineers ("NARTE").  
20

21 Q. What technical licenses do you hold?

22 A. I hold an Advanced Class FCC Radio License and a Technician  
23 Class II NARTE Certification with regulatory and antennas  
24 endorsements.  
25

26 Q. What is your teaching experience?

27 A. I have developed and conducted seminars on a variety of  
28 topics for employees of public utilities and regulatory  
29 agencies. I have also taught classes on behalf of the



1 U.S. Telephone Association. I am presently a member of the  
2 faculty of the NARUC Regulatory Studies Program at the  
3 Public Utility Institute at Michigan State University. In  
4 connection with my teaching, I have written three training  
5 books: Public Utility Income Taxation and Ratemaking,  
6 Public Utility Working Capital, and Generally Accepted  
7 Accounting Principles for Utilities.

8  
9 Q. What has been your experience in regulatory proceedings?

10 A. During the past twenty-five years, I have participated in  
11 numerous rate cases and other regulatory and litigation  
12 proceedings involving electric, gas transmission and  
13 distribution, telephone, water and wastewater utilities  
14 conducted in Alaska, Arizona, California, Colorado,  
15 Connecticut, District of Columbia, Florida, Indiana,  
16 Kansas, Maryland, Minnesota, Missouri, Nevada, New Mexico,  
17 North Carolina, North Dakota, South Dakota, Virginia, and  
18 Wisconsin, as well as the National Energy Board of Canada,  
19 and the Federal Energy Regulatory Commission. I have  
20 testified on matters involving financial and regulatory  
21 accounting, auditing, cost allocation, financial forecasts,  
22 capital and operations budgeting, taxation, corporate  
23 acquisitions, holding companies, valuation and transfer  
24 pricing, deregulation, the cost of capital, industry  
25 restructuring, and regulatory policy.

26  
27 Q. In what proceedings have you testified before this  
28 Commission?

29 A. I have previously testified on behalf of the Commission

1 Staff in proceedings involving Tubac Valley Water Co.,  
2 Santa Cruz Electric, Sun City Water & Sewer, Sun City  
3 West Water and Sewer, Southern Union Gas Company, Southwest  
4 Gas Company, Tucson Electric Power Company, Continental  
5 Telephone Company of California, Continental Telephone of  
6 the West and U.S. West Communications, Inc.